

SANTA BARBARA . SANTA CRUZ

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University of California at San Francisco Office of Technology Transfer Linda Carloni 1320 Harbor Bay Parkway, Suite 150 Alameda, CA 94502

This letter is a follow-up on our conversation of 9/15/95. As I explained, our the nancreas in nine tria the from transfecting growth hormone plasmids into the nancreas in nine trial to the nancreas in nine trial to the nancreas in nine trial to the nancreas in nine trial transfecting growth hormone plasmids into the nancreas in nine trial transfecting growth hormone necessarily transfecting growth This letter is a follow-up on our conversation of 9/15/95. As I explained, our this letter is a follow-up on our conversation of 9/15/95. As I explained, our this letter is a follow-up on our conversation of 9/15/95. As I explained, our this from the pancreas in vivo via the same results from transfecting growth hormone plasmids into the same results from transfecting growth hormone plasmids into the same pancreatic duct led me to the conclusion, that we could successfully use the same pancreatic duct led me to the conclusion. results from transfecting growth hormone plasmids into the pancreas in vivo via results from transfecting growth hormone plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids into the pancreas in vivo via the same plasmids in vivo via the same plasmids into the pancreas in vivo via the same plasmids in vio via the same pl pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion, that we could successfully use the sal pancreatic duct led me to the conclusion. simple approach for transfecting foreign DNA into any segment of the gut. I DNA into any segment of the gut. I and into any segment of the gut. I with Ira Goldfine and into any segment of the gut. I are segment of the gut. I a originally conceived of this idea on 9/8/95 and discussed it with Ira Goldfine and the advantages of this approach for gene therapy with the steve Rothman on 9/13/95. The advantages of this approach interest along with the steve Rothman on 9/13/95. The advantages formulations, the genes of interest along timed release formulations. Steve Rothman on 9/13/95. The advantages of this approach for gene therapy are with the tremendous. Using timed release formulations, the genes of interest, along with the tremendous. Vehicle, could be taken by mouth or by rectal suppository. Dear Linda,

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epithelial cells (the cells that line the gut) are secretory cells and secrete into the gut Scattered throughout the length of an in the lumen, lymph system and blood stream. Scattered the largest endocrine cells. making the gut the largest endocrine cells. making the gut the largest endocrine cells. lumen, lymph system and blood stream. Scattered throughout the length of the gut the largest endocrine organ in the are highly efficient endocrine cells, making the gut the relation inducing efficient and are highly efficient could also be targets for gene therapy, thereby inducing efficient body. These cells could also be targets are highly efficient endocrine cells, making the gut the largest endocrine organ in the the largest endocrine organ in the sut the largest endocrine organ in the largest endocrine organ The gut is also the largest organ in the immune system.

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I just wanted to give you a general idea of the invention and its potential uses. I think it is the simplest and potentially most useful formulation of the gene therapy concept so far. I will retain a copy of this letter in my files. I have also included a copy of the results from our recent pancreas transfection experiments.

Sincerely,

Miles

Michael S. German, M.D.